

# **Asanté FriendlyNET 2024P**

## **Dual Speed Hub**

### **User's Guide**

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## **Introduction**

Congratulations on your purchase of a FriendlyNET dual speed hub. This 24-port hub complies fully with IEEE802.3 and IEEE802.3u standards.

All ports accept twisted-pair cable and provide automatic media detection and auto-negotiation of 10Base-T or 100Base-TX devices. The hub also provides an uplink push button for the 12th port, which can be cascaded to another hub via straight-through cable.

The dual speed hub can be placed on a tabletop or rack mounted. With unmatched flexibility, it ensures efficient operation in any LAN environment, regardless of size.

## **Features**

The FriendlyNET 2024P Dual Speed Hub has the following features:

- ☐ 24 10/100Mbps auto-sensing ports
- ☐ Compliance with IEEE802.3 and IEEE802.3u Ethernet standards
- ☐ One up-link push button for cascading
- ☐ Global LEDs: Power indicator, 10Mbps and 100Mbps collision
- ☐ Port LEDs: Link/Activity for both 10Mbps and 100Mbps
- ☐ Automatic partitioning of faulty ports
- ☐ Hub segmentation to reduce collisions
- ☐ 13-inch rack mount width
- ☐ CE mark certification
- ☐ Internal switching power supply

# Package Contents

The package contains the following items:

- ☐ (1) FriendlyNET 2024P Dual Speed Hub
- ☐ (1) AC power cord
- ☐ (4) Self-adhesive rubber feet
- ☐ (1) Rack-mount kit, which includes two rack-mounting brackets and mounting screws
- ☐ User's Guide (this book)

# Front Panel Information

The following sections describe the key features of the FriendlyNET 2024P Dual Speed Hub front panel and how to use them.



Figure 1 2024P hub front panel

## LEDs

The LEDs on the front panel provide visual evidence of the status of the following items:

- ☐ Hub power supply
- ☐ Transmission and collision indicator
- ☐ Connection (link) speed of 10Mbps or 100Mbps
- ☐ Data activity on each segment

The arrangement of the LEDs on the front panel is shown in Figure 2.



Figure 2 LEDs on 2024P hub

Table 1 Power LED (PWR)

LED Indicator	Color	Description
Power	Green	The unit is powered on and ready for use
	Off	The unit is powered off

If the power LED is OFF, check the following to isolate the problem:

- ❑ Make sure the power cord is properly connected to the power outlet and is properly inserted into the power connection on the hub
- ❑ Determine whether the outlet is functional by plugging another device into it

Table 2 Collision LEDs (100M, 10M COL)

LED Indicator	Color	Description
Collision	Off	There are no collisions
	Blinking Yellow	There is data transmission, and collisions are occurring

Table 3 Link/Activity LEDs (100M, 10M Link/Act)

LED Indicator	Color	Description
Link/Activity	Off	No link pulse detected at this speed on the port
	Green	A link pulse has been detected at this speed on the port
	Blinking Green	Data transmission is occurring on the link at this speed

Hub Ports

There are twenty-four RJ-45 connectors on the front panel. The 10Mbps or 100Mbps speed of each port is automatically determined when you connect the hub to 10Base-T or 100Base-Tx devices.

Normal/Uplink Push Button

One Normal/Uplink push button is located at the right end of the front panel. You can use it to change the connection mode of the 12th port on the hub, for connecting to either a PC or another hub. The default setting is in the Normal (MDI-X) position, which is the “out” position. The port is configured to connect with a PC when the button is in this position. When the push button is pressed in (MDI), it allows you to connect with another hub using straight-through twisted pair cable. See “Interconnecting Hubs” for details.

Rear Panel Information

The following sections describe the elements of the rear panel of the FriendlyNET 2024P Dual Speed Hub.



Figure 3 2024P hub rear panel

### Power Cord Connector (100-240VAC)

The power cord connector may be connected to any power source within the indicated voltage range. The internal power supply switch will automatically set the appropriate voltage.

### Power Control Switch

Use this switch to power the unit off when connecting it to a power source, and power it on when it is properly connected to power.

The following sections cover the procedures you need to follow in order to place your FriendlyNET 2024P Dual Speed Hub and connect it to workstations or other hubs.

## Placing or Rack Mounting the Hub

The FriendlyNET 2024P Dual Speed Hub is supplied with two mounting brackets, six screws, and four rubber feet for mounting the rack or placing it on a flat surface.

### Placing the Hub on a flat surface

- 1 Apply the four rubber feet near the four corners of the bottom of the unit.
- 2 Put the unit on the flat surface.

### Mounting the Hub in a Rack

- 1 Place a mounting bracket over the mounting holes on each end of the unit.
- 2 Insert each screw through the bracket and into a mounting hole in the hub as shown in Figure 4.
- 3 Insert the unit into your 13-inch rack.

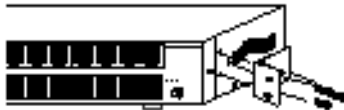


Figure 4 Rack mounting bracket

## Connecting Stations to Hub Ports

Use the following procedure to connect a 10Base-T or 100Base-TX Ethernet server or workstation to the hub.

Keep in mind that you can connect or disconnect network cable segments from the hub while the power is on. plugging in or removing network cables while your hub is running will not interrupt the operation of the hub.

- 1** Make sure that the length of the straight-through cable between the hub and the station does not exceed 100 meters, including all patch cables and cross connect wires. 10Base-T twisted pair Ethernet cabling should be to Category 3 standards, and 100Base-TX twisted pair Fast Ethernet cabling should be to Category 5 standards.
- 2** Connect one end of the cable to the RJ-45 connector on the hub, and the other end to the workstation or server, as shown in Figure 5.

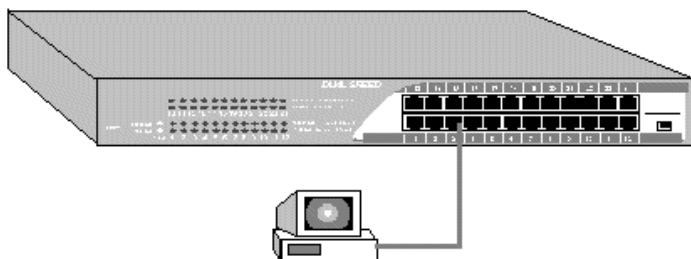


Figure 5 Connecting a station to a hub port

## Interconnecting Hubs

Use the following procedure to connect your FriendlyNET 2024P Dual Speed Hub to another hub in a cascading configuration.

- 1** Obtain a straight-through cable (Category 3 for 10Mbps only, Category 5 for all others) that does not exceed 5 meters in length, including all patch cables and cross connect wires.
- 2** Connect one end of the cable to the 12th (uplink) port of your hub.
- 3** Connect the other end of the cable to any port of the other hub *except* the uplink port on that hub. The connections should be as shown in Figure 6.
- 4** Press the Uplink button next to the 12th port on your hub.

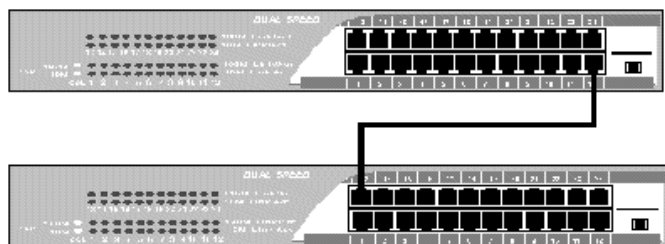


Figure 6 Interconnecting two hubs

You can connect hubs together using other ports than the uplink port, but in this case, you must use a cross-over cable.

## Product Specifications

<b>Standards supported</b>	IEEE 802.3 Ethernet standard, IEEE 802.3u Fast Ethernet standard
<b>Interfaces</b>	24 RJ-45 Connectors for 10Base-T and 100Base-Tx Fast Ethernet
<b>Input voltage</b>	100 to 240 VAC at 50 to 60 Hz
<b>Power consumption</b>	30 W
<b>Cabling</b>	Category 3 for 10Mbps only, Category 5 for all others
<b>Operating temperature</b>	0 to 40° C
<b>Storage Temperature</b>	-20 to 70° C
<b>Operating Humidity</b>	10 to 90% RH
<b>Storage Humidity</b>	5 to 90% RH
<b>Dimensions</b>	330mm (13") X 43mm X 230.5mm
<b>Weight</b>	2.6Kg (5.69lb)
<b>Certification</b>	FCC Class A, CE Class A, VCCI 1



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